REMARKS

Claims 1-4 are pending. By this Amendment, Claim 3 is amended. Applicant respectfully submits no new material is presented herein.

Claims 1-4 Recite Patentable Subject Matter

Claims 1 and 3 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Number 5,731,779 to Kikuchi (Kikuchi '779) in view of U.S. Patent Number 6,122,040 to Arita et al. (Arita). Claims 2 and 4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kikuchi '779 in view of Arita as applied to Claims 1 and 3, and further in view of U.S. Patent Number 6,119,067 to Kikuchi (Kikuchi '067). Applicant respectfully traverses the rejections.

Claim 1 recites a moving body transmitter and receiver axis adjusting system, including, a transmitter and receiver mounted on a moving body, the transmitter and receiver transmitting a detection signal in a predetermined scanning area and receiving, as a reflected signal, the detection signal reflected from an object; a reference reflecting body placed in a predetermined position relative to the moving body, the reference reflecting body reflecting the detection signal; automatic adjusting means for setting a detection area included in the scanning area and narrower than the scanning area, the automatic adjusting means capable of adjusting the detection area within the scanning area, wherein the reference reflecting body is positioned on an object detection axis of the detection area; and informing means for informing of a deviation between the object detection axis and the reference reflecting body that exceeds an area adjustable by the automatic adjusting means.

In Claim 1, the automatic adjusting means adjusts the detection area within the scanning area to position the reference reflecting body on an object detection axis of the detection area. And when a deviation between the object detection axis and the reference reflecting body exceeds an area adjustable by the automatic adjusting means, the informing means informs of such a deviation. Owing to this structural arrangement, the reference reflecting body is positioned on the object detection axis of the detection area by auto aiming while preventing a region not directly used to detect the object from increasing as a result of having to set the scanning area unnecessarily wide. Moreover, when the reference reflecting body cannot be positioned on the object detection axis by auto aiming with the automatic adjusting means, the informing means then informs of the deviation to raise an alarm.

Claim 3 recites a moving body transmitter and receiver axis adjusting system, including a transmitter and receiver mounted on a moving body, the transmitter and receiver transmitting a detection signal in a predetermined scanning area and receiving, as a reflected signal, the detection signal reflected from an object; a reference reflecting body placed in a predetermined position relative to the moving body, the reference reflecting body reflecting the detection signal; automatic adjusting means for setting a detection area narrower than the scanning area, the automatic adjusting means capable of adjusting the detection area, wherein the reference reflecting body is positioned on an object detection axis of the detection area; and informing means for informing of the extent to which the detection area is outside the scanning area as a result of the adjustment by the automatic adjusting means.

In Claim 3, when the automatic adjusting means adjusts the detection area to position the reference reflecting body on the object detection axis of the detection area. If a portion of the detection area extends outside the scanning area, the informing means informs of the extent to which the portion extends outside the detection area. Owing to this structural arrangement, the reference reflecting body is positioned on the object detection axis of the detection area by auto aiming while preventing a region not being directly used for detecting the object from increasing as a result of setting the scanning area unnecessarily wide. Moreover, when a portion of the adjusted detection area extends outside the scanning area due to the auto aiming, the informing means informs of the extent the portion extends outside the detection area and raises an alarm.

Regarding Kikuchi '779, Applicant respectfully notes Kikuchi '779 teaches a radar apparatus 10 that incorporates a transmitter and receiver therein and is mounted on a car or moving body 1. The radar apparatus 10 transmits a detection signal in a predetermined scanning area Sh and/or Sv and receive, as a reflected signal, the detection signal reflected from a standard reflecting body 2. The reflecting body 2 is positioned a predetermined distance relative to the car 1 and reflects the detection signal. The flow chart of Figure 6 provides the steps in automatically adjusting the aiming of the radar apparatus 10 wherein a detection range before aiming Fh and/or Fv is included in a scanning region Sh and/or Sv as well as a detection range after aiming Fh' and/or Fv' is included in the scanning region Sh and Sv. As shown in Figures 1 and 2, both detection ranges Fh(Fh') and/or Fv(Fv') are smaller than the scanning region Sh and/or Sv. The flow chart of Figure 6 explains the steps carried out to automatically

adjust the detection areas within the scanning region Sh and/or Sv, wherein the reflective body 2 is placed on an object axis of the detection area.

As clear from the above, Kikuchi '779 essentially discloses a standard reflecting body is located on the predetermined portion relative to a vehicle and setting of a detection range setting means that is changed so as to make the position of the detected reference reflecting body conform to a standard position stored in the standard position storing means. However, Kikuchi '779 does not teach or suggest informing of the extent to which a deviation between the object detection axis and reference reflecting body exceeds an adjustable area, or to which a portion of the detection area extends outside the scanning area if such a case arises as a result of the auto aiming.

Applicant respectfully notes Arita teaches determining adjustment is possible when the detection area is within a detection allowable area, the detection area being changed to a proper position by changing inside parameters. If it is determined that the axis deviation cannot be adjusted by the detection area being not located within the detection allowable area, a driver or worker is informed of such a development and the control of making a vehicle chase a preceding vehicle is forcibly stopped and rendered inoperable. However, as with Kikuchi '779, Applicant respectfully submits that Arita fails to teach or suggest informing of the extent to which a deviation between the object detection axis and reference reflecting body exceeds an adjustable area, or to which a portion of the detection area extends outside the scanning area if such a case arises as a result of the auto aiming.

In view of the above, Applicant respectfully submits that combining or otherwise modifying Kikuchi '779 according to the teachings of Arita will merely lead to a control

wherein the deviation axis is large and the detection area is not within the detection allowable area. Further, Applicant notes the resulting system will result in adjustment not being possible and the system will inform the driver of such, so that the preceding vehicle chasing action is forcibly stopped and rendered inoperable.

Put simply, Kikuchi '779 and Arita fail to teach or suggest each and every feature recited by Claims 1 and 3.

To establish *prima facie* obviousness, each and every feature of a rejected claim must be taught or suggested by the applied art of record. M.P.E.P. §2143.03. As explained above, Kikuchi '779 and Arita fail to teach or suggest each and every feature recited by Claims 1 and 3. Therefore, Kikuchi '779 and Arita do not render Claims 1 and 3 obvious. Accordingly, Applicant respectfully submits that Claims 1 and 3 should be deemed allowable over the applied art of record.

Claims 2 and 4 depend from Claims 1 and 3, respectfully. It is respectfully submitted that these dependent claims be deemed allowable for at least the same reasons Claims 1 and 3 are allowable, as well as for the additional subject matter recited therein.

Accordingly, Applicant respectfully requests withdrawal of the rejections.

Conclusion

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of Claims 1-4, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 107348-00385**.

Respectfully submitted,
ARENT FOX PLLC

Murat Ozgu
Attorney for Applicant
Registration No. 44,275

Customer No. 004372

1050 Connecticut Avenue, NW, Suite 400
Washington, DC 20036-5339
Telephone: (202) 857-6000

CMM:MO/elp